

Dr Mika Ala-Korpela relocated to Australia in January 2018 and started working as the Head of Systems Epidemiology at the Baker Heart and Diabetes Institute in Melbourne. He is also holding a Professorship in Computational Medicine at the Medical Faculty, University of Oulu, Finland (2009-) and at Population Health Science, Bristol Medical School, University of Bristol, UK (2013-). He also has an adjunct position as a Research Professor in Systems Epidemiology at the Alfred Hospital, Monash University, School of Public Health and Preventive Medicine in Melbourne (2017-). His research focuses on the utilisation of various ‘omics technologies in clinical and systems epidemiology to study the aetiology of metabolic diseases. He has led several multidisciplinary large-scale studies in relation to systems epidemiology of cardiometabolic conditions, including studies on coronary heart disease and type 2 diabetes. He has developed, and is developing, high-throughput molecular methodologies relevant for biomarker research in cardiometabolic health and diseases. He has pioneered high-throughput applications of serum metabolomics in epidemiology and genetics as well as multivariate statistical analyses, including neural networks in population stratification and risk assessment. His biological and biomedical key focus area is lipoprotein and lipid metabolism. His most recent new contributions are in relation to causal epidemiology and applications of metabolomics, genetics and Mendelian randomization in drug research. He has published over 190 articles in international peer-reviewed journals, a few exemplars of which are listed below. His recent blog on Metabolic Phenotyping in Epidemiology can be found [here](#). He started recently as an Associate Editor in the International Journal of Epidemiology.

Examples of recent publications (up-to-date list available [here](#)):

- Genetic support for a causal role of insulin resistance on circulating branched-chain amino acids and inflammation. *Diabetes Care*. 2017 Oct. doi: 10.2337/dc17-1642.
- Mendelian randomization analyses in cardiometabolic disease: the challenge of rigorous interpretations of causality. *Nat Rev Cardiol*. 2017 Oct;14(10):577-590.
- Quantitative serum NMR metabolomics in large-scale epidemiology: a primer on -omic technology. *Am J Epidemiol*. 2017 May. doi: 10.1093/aje/kwx016
- Metabolic profiling of pregnancy: Cross-sectional and longitudinal evidence. *BMC Med*. 2016 Dec;14(1):205.
- Effects of hormonal contraception on systemic metabolism: cross-sectional and longitudinal evidence. *Int J Epidemiol*. 2016 Oct;45(5):1445-57.
- Metabolic profiling – multitude of technologies with great research potential, but (when) will translation emerge? *Int J Epidemiol*. 2016 Oct;45(5):1311-16.
- Metabolomic profiling of statin use and genetic inhibition of HMG-CoA reductase. *J Am Coll Cardiol*. 2016 Mar;67(10):1200-10.
- Genome-wide study for circulating metabolites identifies 62 loci and reveals novel systemic effects of *LPA*. *Nat Commun*. 2016 Mar;7:11122.
- The biomarker GlycA is associated with chronic inflammation and predicts long-term risk of severe infection. *Cell Syst*. 2015 Oct;1(4):293-301.
- Metabolite profiling and cardiovascular event risk: a prospective study of 3 population-based cohorts. *Circulation*. 2015 Mar;131(9):774-85.
- Metabolic signatures of adiposity in young adults: Mendelian randomization analysis and effects of weight change. *PLoS Med*. 2014 Dec;11(12):e1001765.
- Biomarker profiling by nuclear magnetic resonance spectroscopy for the prediction of all-cause mortality: an observational study of 17,345 persons. *PLoS Med*. 2014 Feb;11(2):e1001606.
- Long-term leisure-time physical activity and serum metabolome. *Circulation*. 2013 Jan;127(3):340-8.
- Detailed metabolic and genetic characterization reveals new associations for 30 known lipid loci. *Hum Mol Genet*. 2012 Mar;21(6):1444-55.
- Genome-wide association study identifies multiple loci influencing human serum metabolite levels. *Nat Genet*. 2012 Jan;44(3):269-76.